
Video Games and Violence

State-of-the-Art Summary

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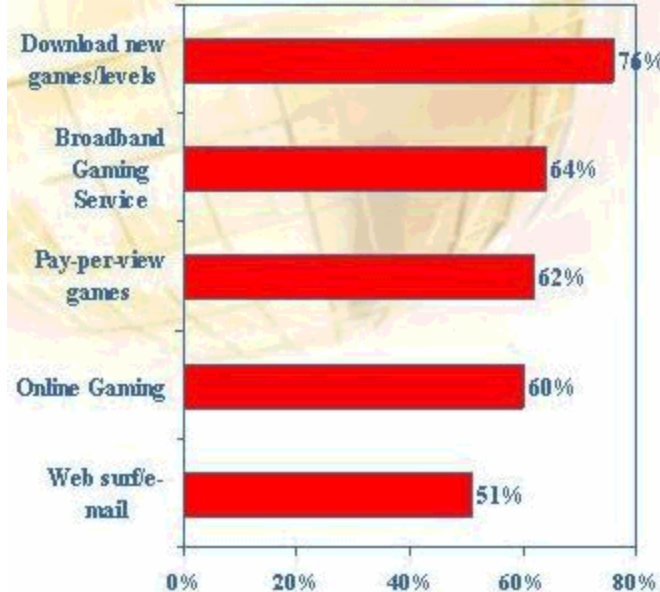
The Netherlands

www.ipo.tue.nl/homepages/mrauterb/

Video Game Business (1)

Interest in Gaming Connectivity

High Interest Responses to Potential Connectivity Applications (%)



- Some interest in Internet surfing
- High levels of interest in applications that will enhance gaming
- Keys for driving interest:
 - Content
 - Offer new and compelling experience

Source: IDC Consumer Devices, 3Q01

N=350

Note: 4 & 5 responses combined to yield "High Interest Responses"

Scale: 5 - Very Interested; 1 - Not Interested

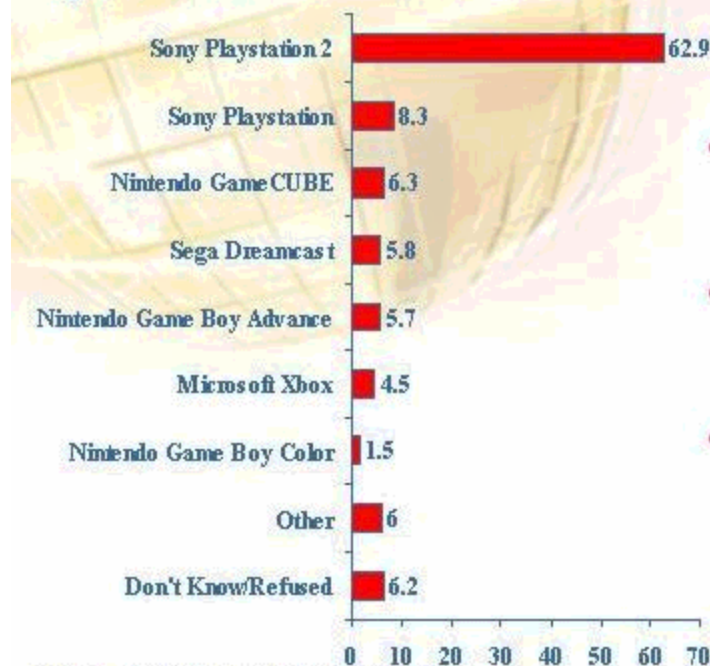
Note: Numbers recalculated to remove all "3" answers



Video Game Business (2)

Intent to Purchase Within Next Six Months

Specific Consoles Gamers Plan to Purchase (%)



- 32.9% intend to purchase a new console
- Overwhelming majority, 62.9% plan to purchase PS2
- Small numbers plan to purchase Xbox (4.5%) and GameCUBE (6.3%)

Source: IDC Consumer Devices, 3Q01

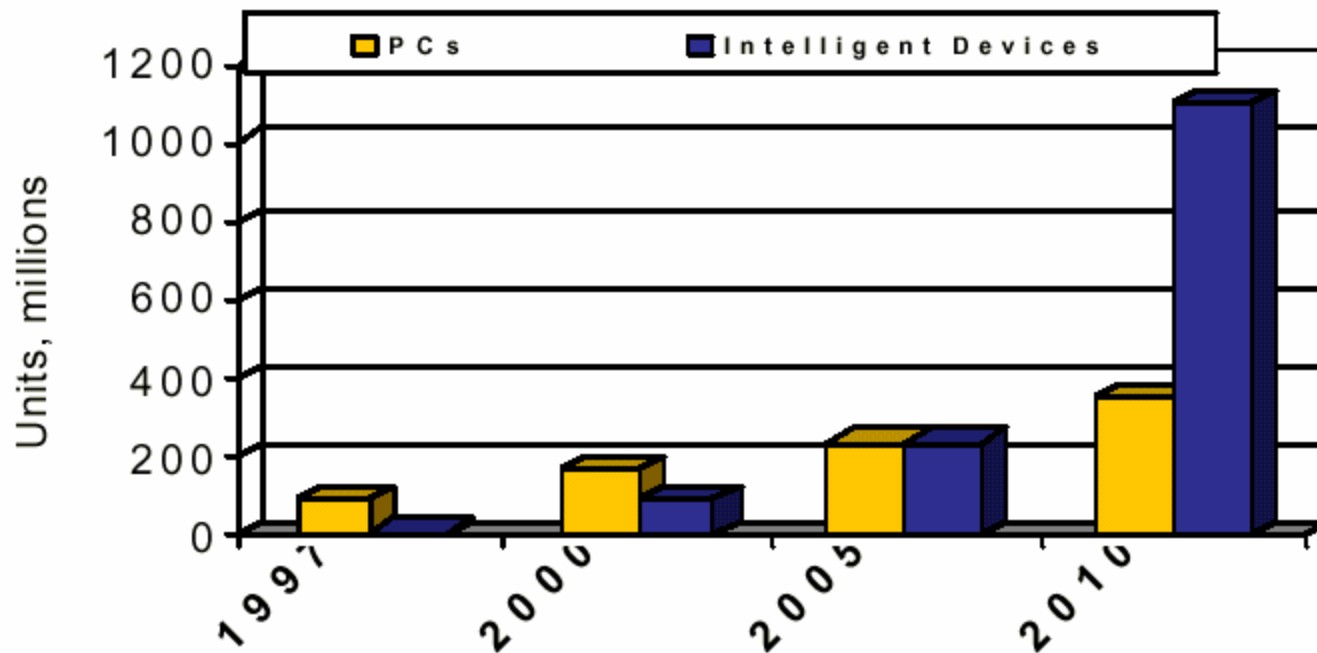
N=109

Question: Which console do you/your family plan to purchase?



Forecast Intelligent Devices

Intelligent Devices Will Outpace PCs



- *Phones, PDAs, game consoles, set-tops / web TVs are becoming Internet connected* Source: IDC

Expenditure on Entertainment

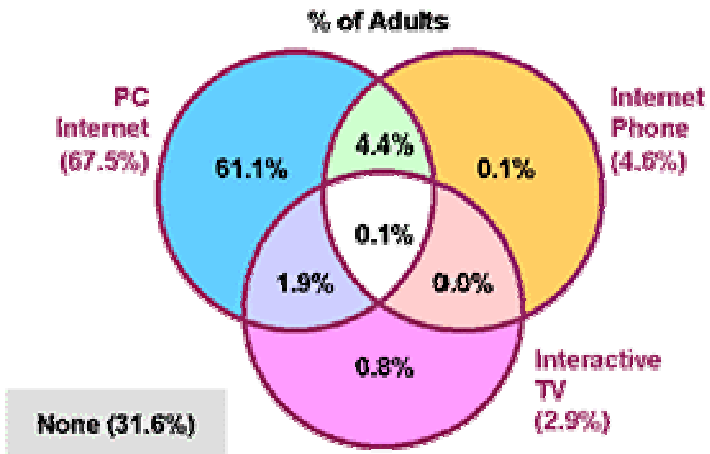
PROJECTED GROWTH IN SALES OF GLOBAL ENTERTAINMENT GAMES (In \$Billions)

	<u>2001</u>	<u>2006</u>	<u>% CHG.</u>
<u>Console software</u>	9.64	18.34	90
<u>Console hardware</u>	9.19	14.29	55
<u>PC software</u>	7.12	8.33	17
<u>Handheld software</u>	2.89	3.76	30
<u>Handheld hardware</u>	2.73	3.40	25
<u>Rental</u>	3.14	4.14	32
<u>Online</u>	0.57	5.65	891
<u>Interactive TV</u>	0.08	6.15	7,584
<u>Mobile</u>	0.76	11.01	1,354
<u>Arcades</u>	13.86	10.66	(23)
<u>TOTAL</u>	<u>49.99</u>	<u>85.71</u>	<u>71</u>

Source: Informa Media Group; *The Wall Street Journal*
 [taken from RICE University (2002) Information Technology Sector Report]

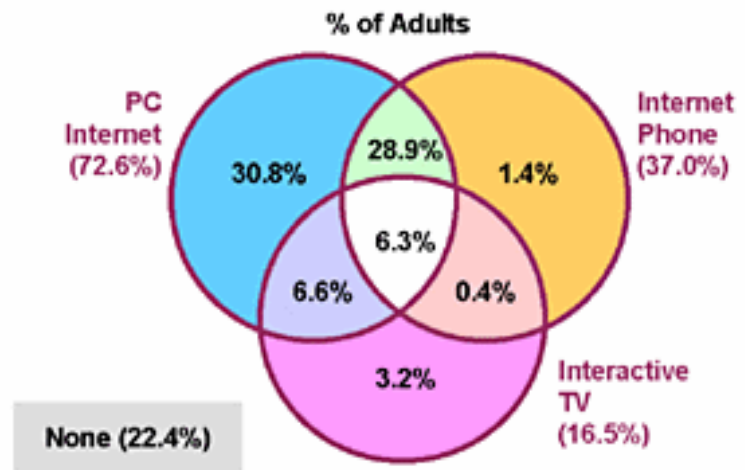
U.S. interactive platform penetration

U.S. interactive platform penetration, 2000



Base: U.S. adults (205 million)

Projected U.S. interactive platform penetration, 2005



Source: GartnerG2, August 2001

Children and Media Violence (1)

By the time a child is eighteen years old, he or she will witness on television (with average viewing time) 200,000 acts of violence including 40,000 murders (Huston, et al, 1992).

Smith and Donnerstein (1998) found in the three year, National Violence Television Study that:

61% of television programs contain some violence.; 43% of violent scenes contain humor; Perpetrators of violence were depicted as attractive, 44% of the time; No immediate punishment was depicted in nearly 75% of the violent scenes; Many of the violent scenes depicted no harmful consequences.

Young children who see media violence have a greater chance of exhibiting violent and aggressive behavior later in life, than children who have not seen violent media (Congressional Public Health Summit, 2000).

Studies show that when children and young adults play violent video games their aggressive behavior increases (Anderson and Bushman, 2001).

60-90% of the most popular video games have violent themes (Anderson, 2001)

59% of fourth grade girls and 73% of fourth grade boys say that the majority of their favorite video games are violent (Anderson, 2001).

References:

Anderson, C. A. (2001, October 22). The impact of violent video games. Iowa State University: The impact of entertainment media and violence on children and families. Accessed at: <http://www.extension.iastate.edu/families/media/program.anderson.html> (last visited 2/12/02)

Anderson, C. A. and Bushman, B. J. (2001, September). Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: A meta-analytic review of the scientific literature. *Psychological Science*, 12, 353.

Congressional Public Health Summit (2000, July 26). Joint statement on the impact of entertainment violence on children. Accessed at: <http://www.aap.org/advocacy/releases/jstmtevc.htm> (last visited 2/14/02)

Smith, S. L., & Donnerstein, E. (1998). Harmful effects of exposure to media violence: Learning of aggression, emotional desensitization, and fear. In R. G. Geen & E. Donnerstein (Eds.), *Human aggression: Theories, research, and implications for social policy* (pp. 167-202). New York: Academic Press.

Huston, A.C. et al (1992). *Big world, small screen: The role of television in American society.* Lincoln, NE: University of Nebraska Press

Children and Media Violence (2)

Children who spent more time playing video games were more active overall and playing was not at the expense of other activities.

No relationship between video game play and aggressive behavior was found.

Children who played video games more often were found to have a significantly higher IQ.

[Van Schie, E. & Wiegman, O. (1997). Journal of Applied Social Psychology, Vol. 13. Children and Videogames: Leisure Activities, Social Integration, and Social Performance, 1175-1194]

Video game play does not alter a child's activities which include leisure activities, school activities, and peer involvement.

[Creasey, Gary & Meyers, B. (1986). Merrill- Palmer Quarterly, Vol.32, No.3. Video Games and Children: Effects on Leisure Activities, Schoolwork, and Peer Involvement, 251-262]

Children who played a violent video game when compared to those who played a nonviolent game displayed more aggressive and violent behaviors.

[Schutte, N. S. & Malouff, J. M. (1988). Journal of Applied Social Psychology, Vol. 18. Effects of Playing Videogames on Children's Aggressive and Other Behaviors, 454- 460]

“There are only few and controversial research results in the specific area of violent video games and children.”

Children and Media Violence (3)

Jan Wickléus (2001) Senior master of civics at Torsbergs Gymnasium, Bollnäs (Sweden):

“It may be controversial whether media violence leads to aggression or not, but one issue has to be raised and that is where the chief responsibility for the exposure of children to media violence lies.

Young children are heavy TV viewers.

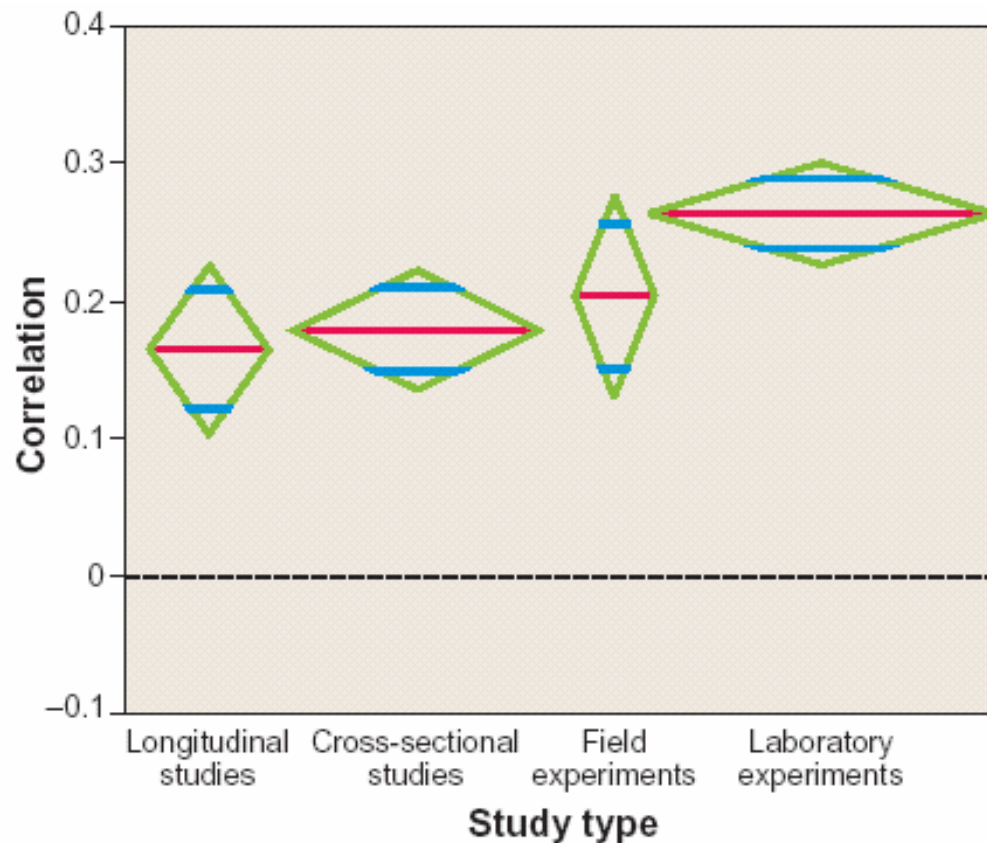
Children are very susceptible to the effects of media violence. Television tends to present violence in unrealistic and misleading ways or even with a touch of glorification. Even news programs or documentaries can distort violence by exaggerating or sensationalizing events.

The producers and the broadcasters of that media violence are of course responsible. They can help parents by not offering violent shows on peak children viewing hours and by increasing the number of hours of educational programming and by developing warning labels to enable both adults and young people to make informed choices about what to watch.

Parents can also protect their children from excessive media violence by carefully selecting programs that their children are exposed to.

TV watching also keeps children from other, more beneficial activities such as reading and playing with friends.”

Media Violence and Aggression



Effects of media violence on aggression for different types of studies. Diamond widths are proportional to the number of independent samples. There were 46 longitudinal samples involving 4975 participants, 86 cross-sectional samples involving 37,341 participants, 28 field experiment samples involving 1976 participants, and 124 laboratory experiment samples involving 7305 participants. Red lines indicate the mean effect sizes. Blue lines indicate a 95% confidence interval. Note that zero (dashed line, indicating no effect) is excluded from all confidence intervals.

[source: C. A. Anderson and B. J. Bushman (2002), SCIENCE vol 295, pp. 2377-2379]

Horrifying Violence in Reality

On **December 6, 1989** a 25 years old man, product of a violent home, failed military candidate and lover of war films, entered the University of Montréal's School of Engineering building (**Canada**). He murdered 14 women and injured 13 others: 9 women and 4 men.

On **June 1, 1999**, a horrifying school shooting took place in Littleton, Colorado (**United States**). Two teenage gunmen from Littleton killed 25 students and teachers.

On **March 5, 2001** a handgun attack by a 15-year-old boy on fellow students and teachers at a San Diego area (**United States**) high school killed 2 dead and wounded 13. The 15-year-old boy was "addicted to Nintendo games" and violent rock music, and abused drugs.

On **April 26, 2002**, a school massacre happened in Erfurt (**Germany**). A former 19-year-old student fired into the heads of teachers, killing 13 of them. He also killed 2 students, a secretary, and a policeman. As preliminary police investigations determined already the day after the massacre, it was not a wild, run-amok incident, but had been prepared systematically over nearly a year. The student had engaged in intense target practice at an Erfurt combat gun club, and with killer video/computer games, such as "Ninja," "Doom," and "Counterstrike" on his PC at home.

US President's Concerns in 1999

On June 1, 1999, President Clinton asked the US Federal Trade Commission and the Department of Justice to undertake a study of

whether the movie, music recording, and computer and video game industries market and advertise products with violent content to youngsters?

In addition, the President raised two specific questions:

Do the industries promote products they themselves acknowledge warrant parental caution in venues where children make up a substantial percentage of the audience?

And are these advertisements intended to attract children and teenagers?

REPORT OF THE US FEDERAL TRADE COMMISSION (SEPT. 2000)



MARKETING VIOLENT ENTERTAINMENT TO CHILDREN: A REVIEW OF SELF-REGULATION AND INDUSTRY PRACTICES IN THE MOTION PICTURE, MUSIC RECORDING & ELECTRONIC GAME INDUSTRIES

Summary result of this report:

“For all three segments (movies, music, games) of the entertainment industry, the answers are plainly YES.”

[\[full report\]](#)

[\[appendices\]](#)

[\[summary\]](#)

Results of the US FTC Report 2000

Games. Of the 118 electronic games with a Mature rating for violence the Commission selected for its study, 83, or **70 percent, targeted children under 17**. The marketing plans for 60 of these, or 51 percent, expressly included children under 17 in their target audience. For example, one plan for a game rated Mature for its violent content described its “target audience” as “Males 12-17 – Primary; Males 18-34 – Secondary.” Another plan referred to the target market as “Males 17-34 due to M rating (the true target is males 12-34).” Documents for the remaining 23 games showed plans to advertise in magazines or on television shows with a majority or substantial under-17 audience. Most of the plans that targeted an under-17 audience set age 12 as the younger end of the spectrum, but a few plans for violent Mature-rated games targeted children as young as six.

*Since the President requested this study over a year ago, each of the industries reviewed has taken positive steps to address these concerns. Nevertheless, the Commission believes that all three industries (movies, music, games) **should take additional action to enhance their self-regulatory efforts.***

US Senate Hearing 2000 [[URL](#)]



U.S. SENATE COMMITTEE ON
Commerce, Science, and Transportation

JOHN McCAIN, Chairman

•Mar 21, 2000

Mr. David Walsh ,	President, National Institute on Media and the Family
Mrs. Sabrina Steger,	Pediatrics Nurse, Lourdes Hospital
Miss Danielle Shimotakahara,	Student
Dr. Craig Anderson ,	Professor, Iowa State University, Department of Psychology
Dr. Eugene F. Provenzo ,	Professor, School of Education, University of Miami
Dr. Jeanne Funk ,	Professor, University of Toledo, Department of Psychology

•Sept 13, 2000

e.g. industrial representatives:
BMG Entertainment, Acclaim Entertainment, Recording Industry Association, Interactive Digital Software Association

•Sept 27, 2000 [[video](#)]

Mr. Rob Friedman,	Vice Chairman,	Motion Picture Group, Paramount
Mr. Jim Gianopolis,	Chairman,	Fox Films
Mr. Mel Harris,	President and COO,	Sony
Mr. Alan Horn,	President and COO,	Warner Brothers
Mr. Robert Iger,	President and COO,	Disney, Miramax
Mr. Chris McGurk,	Vice Chairman and COO,	MGM
Mr. Walter Parkes,	Co-Head,	Dreamworks
Ms. Stacy Snider,	Chairman,	Universal

Policy Statement on Media Violence

American Academy
of Pediatrics

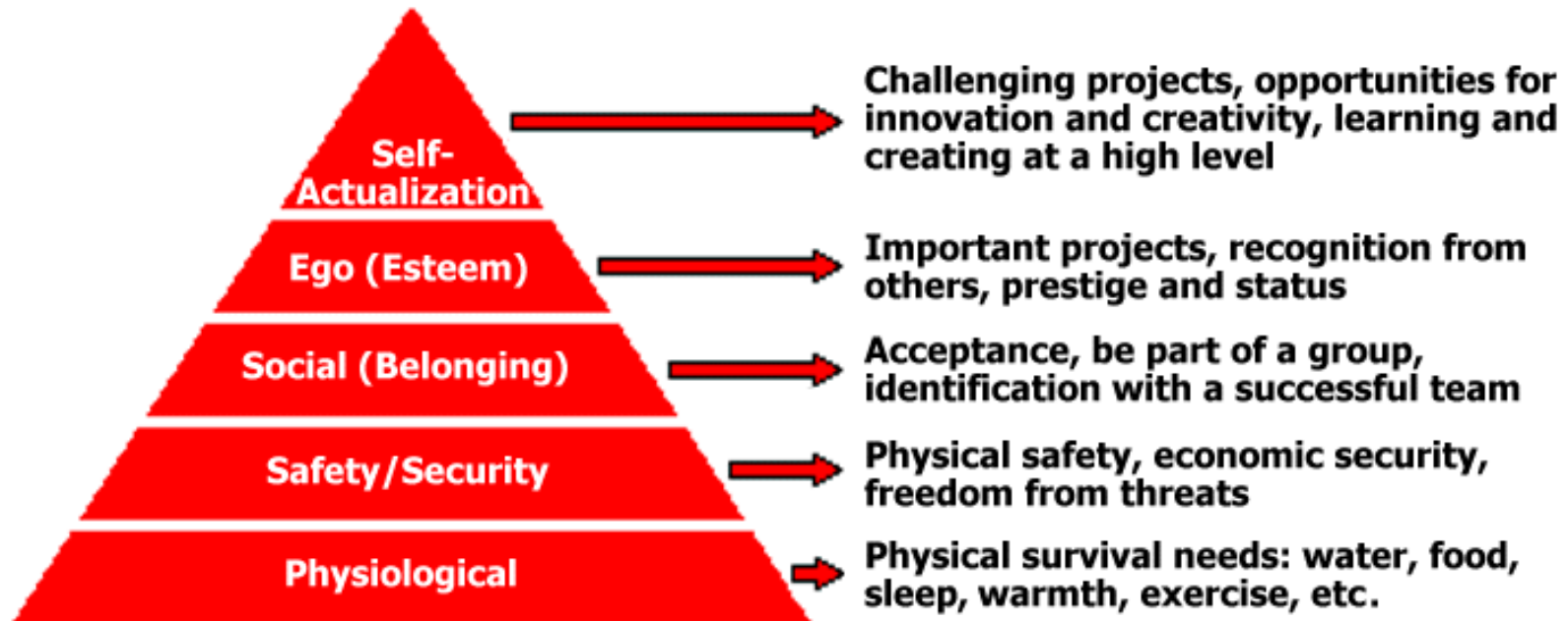


DEDICATED TO THE HEALTH OF ALL CHILDREN™

“The American Academy of Pediatrics recognizes exposure to **violence in media, including television, movies, music, and video games, as a **significant risk** to the health of children and adolescents. Extensive research evidence indicates that **media violence can contribute to aggressive behavior**, desensitization to violence, nightmares, and fear of being harmed. Pediatricians should assess their patients' level of media exposure and intervene on media-related health risks. Pediatricians and other child health care providers can advocate for a safer media environment for children by encouraging media literacy, more thoughtful and proactive use of media by children and their parents, more responsible portrayal of violence by media producers, and more useful and effective media ratings.”**

[Pediatrics, Volume 108, Number 5, November 2001, pp 1222-1226]

Maslow's Hierarchy of Needs



Maslow's Hierarchy of Needs is shown above. The pyramid illustrates the five levels of human needs. The most basic are physiological and safety/security, shown at the base of the pyramid. As one moves to higher levels of the pyramid, the needs become more complex. A collaborative IPT can provide self-actualization through team performance, with the ego and social needs reinforced by other team members.

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[IPT = integrated product team]

The Future of Entertainment Computing

At a conference on violence on the screen in Sweden (in September 1995) the Swedish Minister of Culture transformed the media violence problem into an environmental problem with a responsibility for the whole society:

“We need a media ecology movement to heighten consciousness to fight the waste and pollution which the media produces.

It is indeed a question of the mental environment for our children.

And the questions we must ask ourselves are:

Do we give them a world that is challenging, stimulating, inspiring, and entertaining?

Do we encourage their intelligence, creativity and curiosity?”

Thank you for your attention!